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SYSTEM DESIGN FOR A CONTINUOUS PROGRESS SCHOOL--PART III, THE INSTRUCTIONAL MATERIALS CENTER.

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THE INSTRUCTIONAL MATERIALS CENTER (IMC) OF THE CONTINUOUS PROGRESS SCHOOL WAS DESCRIBED. THE CONTINUOUS PROGRESS SCHOOL PLAN WAS DEVISED BY DR. EDWIN READ AND WAS BEING DEVELOPED AT THE LABORATORY SCHOOL OF BRIGHAM YOUNG UNIVERSITY. THIS REPORT DESCRIBED HOW AN IMC MIGHT OPERATE RATHER THAN HOW ONE IS OPERATING OR IS PLANNED TO OPERATE. AS CONCEIVED, THE IMC COMBINED THE FUNCTIONS OF THE LIBRARY, THE BOOK STORE, THE AUDIOVISUAL CENTER, AND THE DEVELOPMENT OF MATERIALS. FLOW DIAGRAMS OF THE PLANNED OPERATION WERE INCLUDED. RELATED REPORTS ARE ED 010 561, THROUGH ED 010 564. (AL)

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# System Design for a Continuous Progress School:

# Part III The Instructional Materials Center

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# TECHNICAL MEMORANDUM

(TM Series)

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## System Design for a Continuous Progress School: Part III - The Instructional Materials Center

by

Robert L. Egbert and John F. Cogswell
1 August 1964
(Principal Investigator, David G. Ryans)

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# SYSTEM DESIGN FOR A CONTINUOUS PROGRESS SCHOOL: PART III

## THE INSTRUCTIONAL MATERIALS CENTER

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## PREFACE

This is the third document in a series describing the Continuous Progress School, as designed and described by Dr. Edwin Read and his staff at Brigham Young University Laboratory School.

Although the Instructional Materials Center (IMC) is viewed as playing a central role in the Continuous Progress School and although it is the focus of much discussion, such a center is not in operation in a Continuous Progress School and no formal, descriptive documents have been prepared. For this reason, TM-1493/105/00 describes how an IMC might operate rather than how one is operating or is definitely planned to operate.

## ABSTRACT

This document presents a design for the Instructional Materials Center (IMC) for a Continuous Progress School. The IMC, as conceived, combines the functions of the library, bookstore, audiovisual center, and materials development.

## INTRODUCTION

The Continuous Progress School, as designed and described by Dr. Edwin Read and his staff, presents a fastly different teaching learning program from the typical school of today. This different program is reflected in staff functioning, in general school organization, and in various auxiliary subsystems. One such auxiliary subsystem, the Surveillance and Detection System, has already been described (TM-1493/104/00). Another subsystem essential to the functioning of the Continuous Progress School is the Instructional Materials Center (IMC). Description of IMC operation is the purpose of this document.

In any good secondary school, many IMC functions are performed. The school library provides books, reference books, and periodicals; guidance in selection and use of these resources; and supervised study facilities. The audiovisual department provides equipment and materials for classroom use. The bookstore issues, receives, and repairs texts. And the industrial arts department may provide facilities where students can build small pieces of equipment, make charts, etc., for use in their courses. In the Continuous Progress School all of these functions and many additional activities, on a greatly increased scale, are performed in the IMC. Thus, the IMC becomes the center for much of the learning activity of the Continuous Progress School.

As has been indicated, many functions similar to those performed by the traditional library, the audiovisual department, and the bookstore are accomplished by the IMC in the Continuous Progress School. In some instances the functions are almost identical with those in a traditional school. For example, sale of school supplies must take place regardless of the school organization.

In other cases, the basic functions are similar, but the continuous progress nature of the school requires that these facilities be available when the individual student is ready, rather than at the same time for every student. An example of this is the issuing of texts and other course equipment and materials.

In still other instances, the basic nature of the function is different. An example of this is the use of audiovisual equipment. In a traditional school such equipment is circulated, on request, to the various classrooms. In the Continuous Progress School, in which the student rather than the class is the basic unit, either the student goes to a central area to use audiovisual equipment or his carrel is so constructed that he can have the tapes, films, etc., "piped" to him. Thus, these facilities typically are scheduled on student request rather than on faculty request.

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## FUNCTIONS OF THE IMC

In this section of TM-1493/105/00 a number of IMC functions are presented. While this list may not be inclusive, an attempt has been made to describe the operations in a manner sufficiently general that most kinds of anticipated activities can be covered. (The symbols and coding conventions in the flow charts are explained in TM-1493/103/00, page 8).

### Acquisition and Disposition of Purchasable Items

In Figure 1 an account is given of the procedure for acquisition, handling, and selling of student-purchasable items. As is indicated in Figure 1, the stimulus to add a new item to the stock may come from one of several sources (XØ1). A student may wish (AØ2) and request (AØ4) an item not available at the IMC; a staff member may recognize the need for (AØ5) and request (AØ7) an item not previously required; or the IMC staff may receive information on sales in similar organizations or on newly available items (AØ8). Such information, regardless of the source, is evaluated (AØ9), and a decision is made on whether to stock the item (X1Ø). If the item is considered important enough to carry (Q12), it is purchased in appropriate quantity (A12) and put on sale (A13). The sensing system then returns to its original condition (M1 to QØ1). However, to answer other questions about purchasing aspects of the operation, the stock is also periodically examined (A15). If an item is moving slowly, the price may be reduced (A17); if it is moving well, a repurchase may be requested (A18). (This request would then be evaluated (AØ9) before a purchase was made.) From this stage the system either returns to its original condition (X19 to M1) or it may be terminated (A2Ø).

In Figure 1 no attempt is made to depict the detailed operations of purchasing, selling, and accounting. Rather, a brief, generic description is given in order to provide a basis for considering this part of the CPS operation.

### Acquisition of New Books and Equipment for the IMC.

Figure 2 shows the procedures followed in securing books and equipment for the IMC. As was true with student-purchasable items, the stimulus for securing books or equipment may come from any one of several sources (XØ1). Information on new items frequently is received by the school (AØ2). This information is evaluated against school needs (AØ3) and a decision made on whether the item would be useful (XØ4). If the staff gives a positive evaluation, a recommendation is made that the new article be purchased (AØ5).

As books and equipment are used, they are sometimes damaged or worn and should be replaced. Occasionally, also, demand for a specific book or piece of equipment far exceeds supply. In these instances, the IMC staff may recommend replacement or increase in circulating stock(AØ6).

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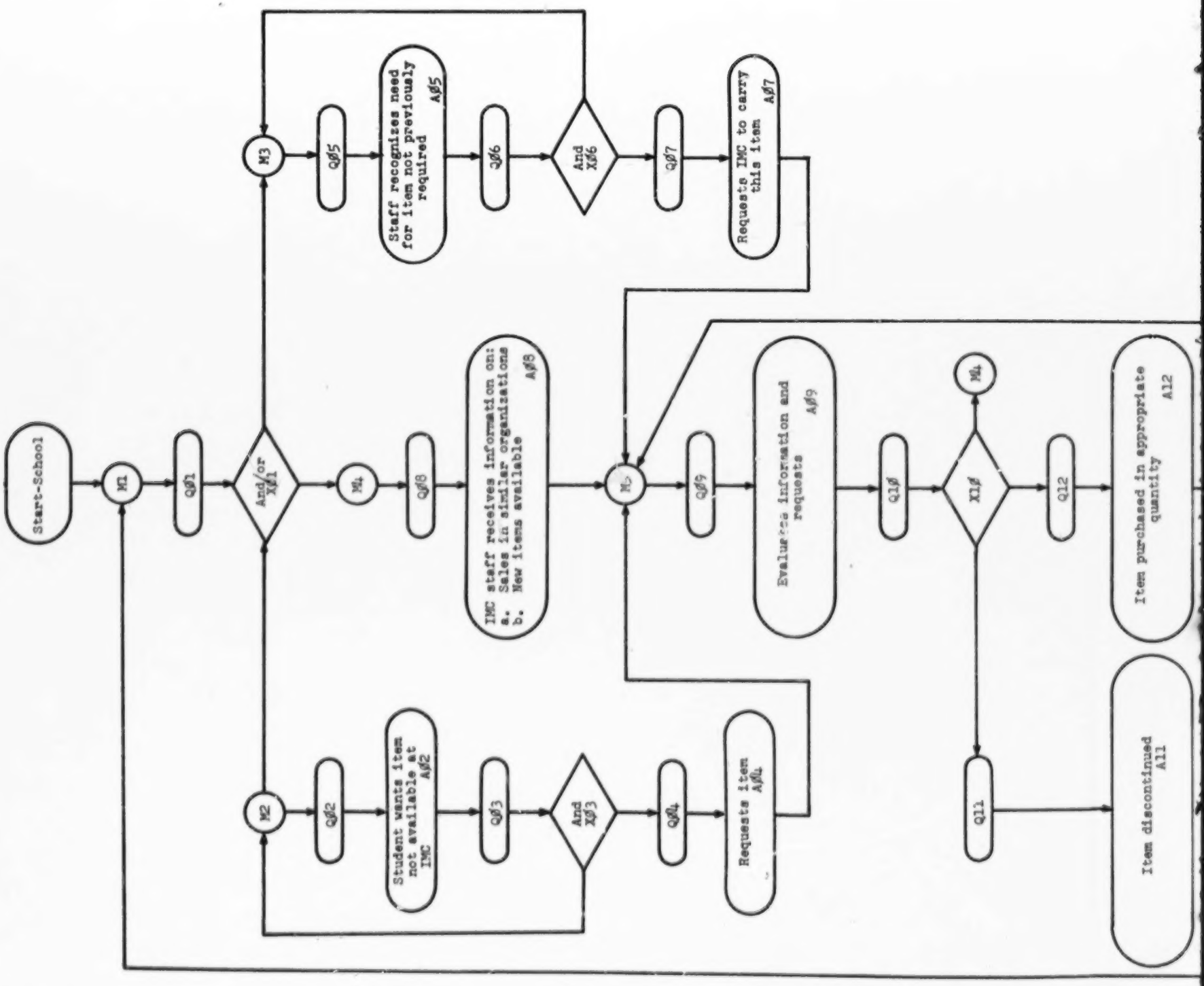
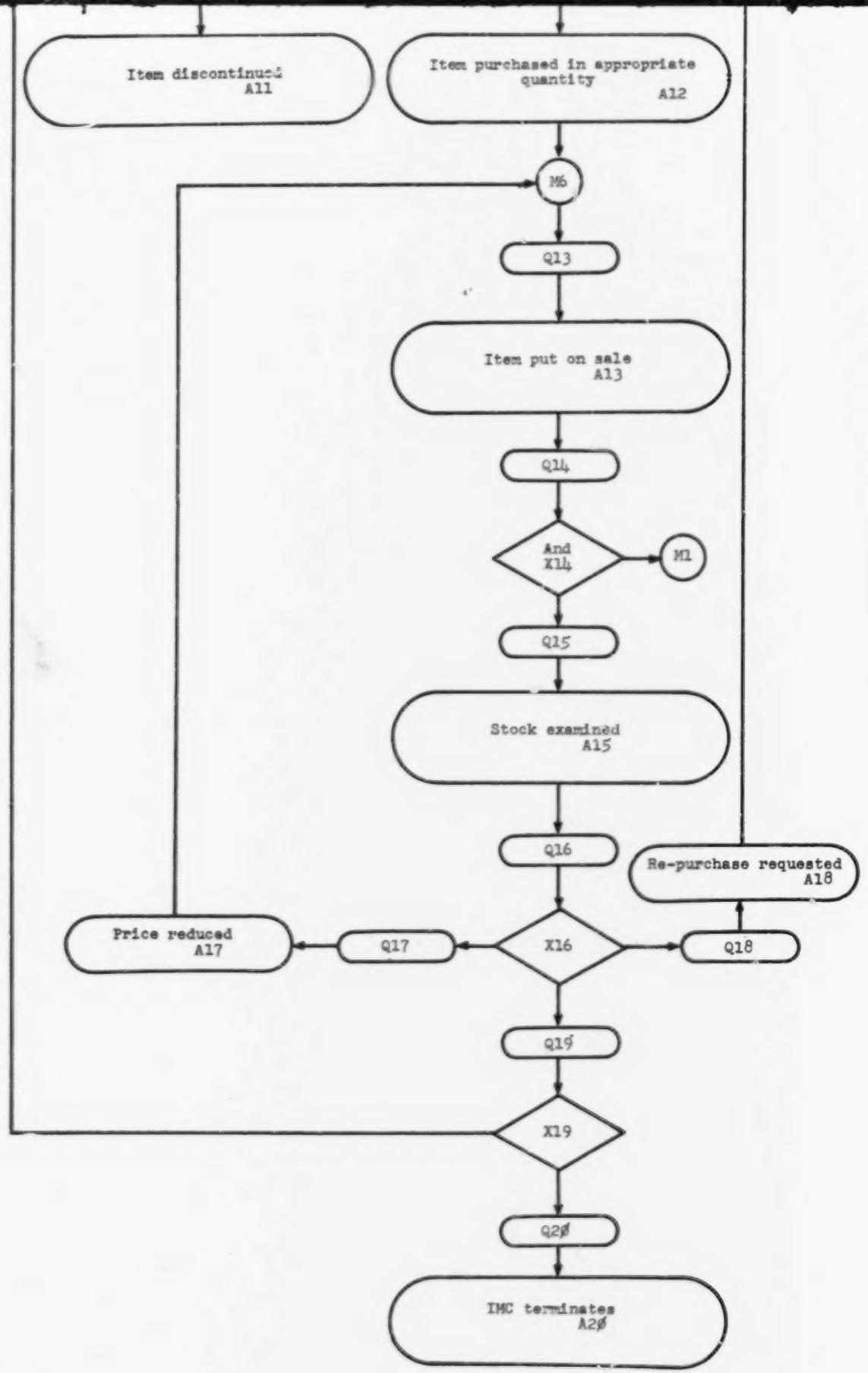



Figure 1. Acquisition and Disposition of Purchasable Items


Item discontinued
A11
Item purchased in appropriate quantity
A12
M6
Q13
Item put on sale
A13
Q14
And
X14
M1
Q15
Stock examined
A15
Q16
Re-purchase requested
A18
Price reduced
A17
Q17
X16
Q18
Q19
X19
Q2Ø
IMC terminates
A2Ø

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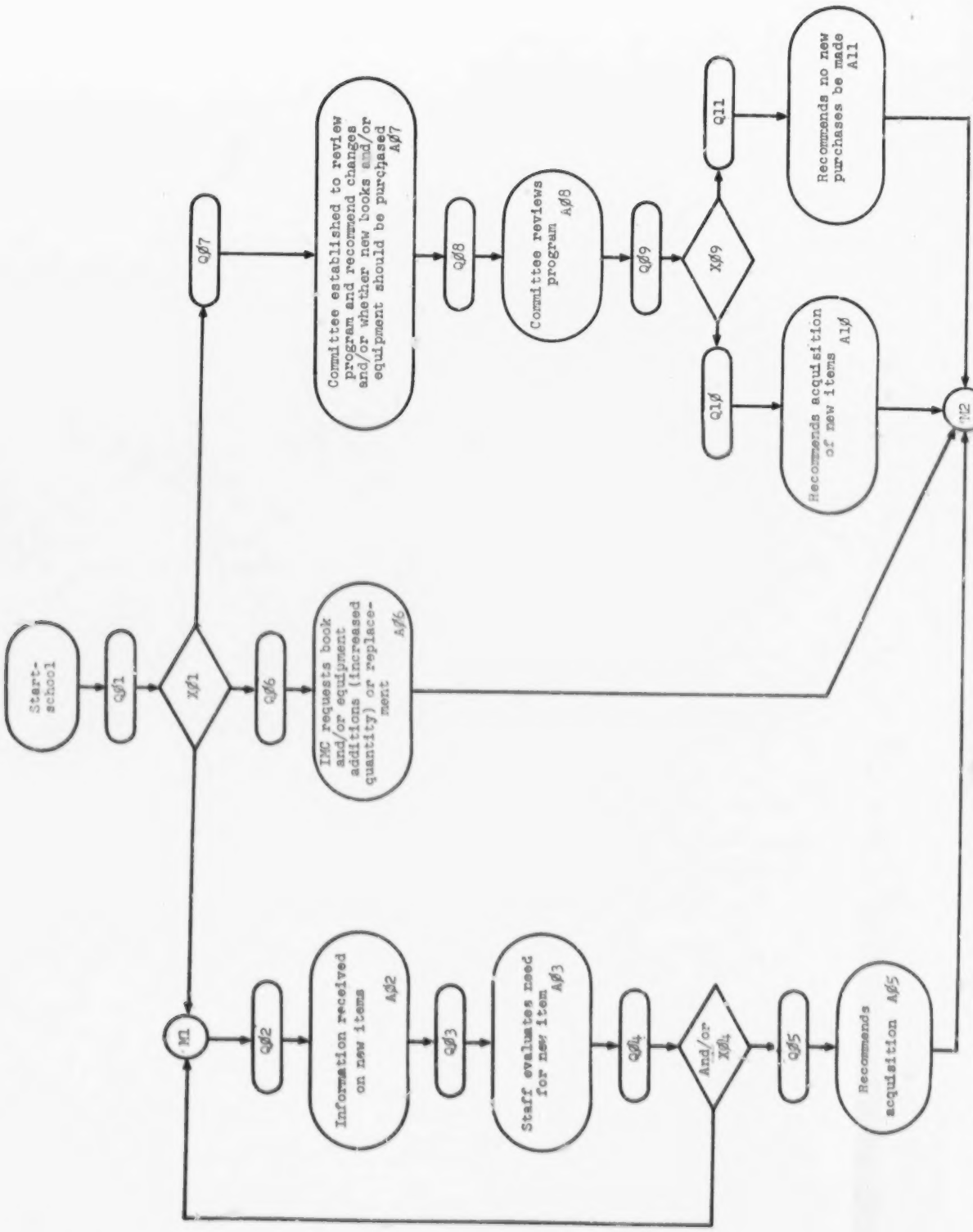
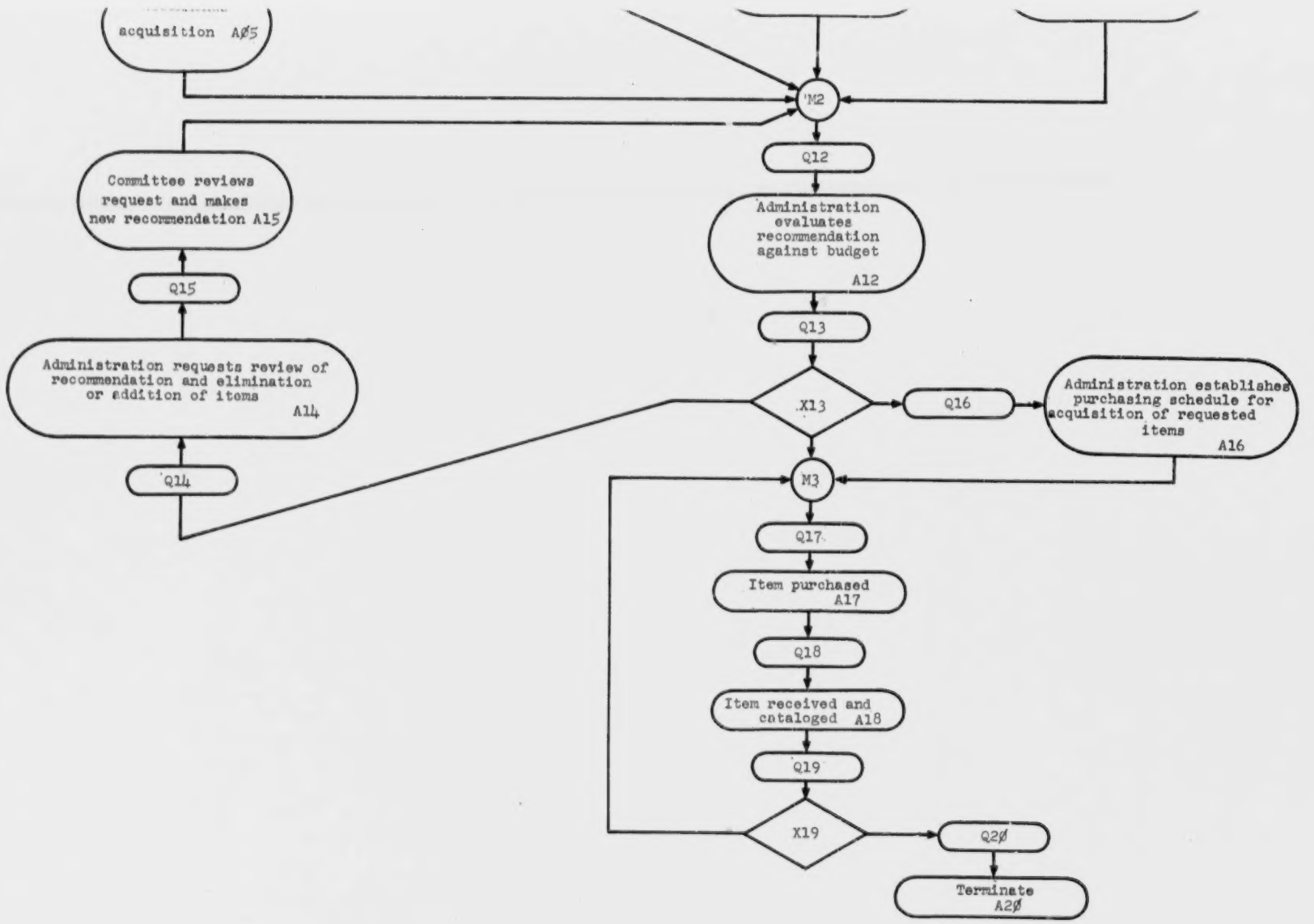



Figure 2. Acquisition of New Books and Equipment for IMC.


acquisition A05
M2
Q12
Committee reviews request and makes new recommendation A15
Administration evaluates recommendation against budget A12
Q15
Q13
Administration requests review of recommendation and elimination or addition of items A14
X13
Q16
Administration establishes purchasing schedule for acquisition of requested items A16
Q14
M3
Q17
Item purchased A17
Q18
Item received and cataloged A18
Q19
X19
Q20
Terminate A20

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While procedures described in AØ2 to AØ5 and in AØ6 are important to operation of the IMC, a far more important long-range procedure is that described in AØ7 to A11. In the course of a school's existence, the program is reviewed periodically and changes recommended. These recommendations have implications for the IMC as well as for other aspects of the school's operation. In AØ7, notation is made of a committee established to review the program and make recommendations. The committee reviews the program (AØ8) and either recommends (A1Ø) or does not recommend (A11) acquisition of new items.

All recommendations for new purchases are brought together (M2 to Q12) for administrative evaluation. Administrative officers evaluate recommendations against the budget and make one of three decisions:

(1) The recommendations are out of line with the budget (either above or below) and should be reviewed (Q14). In this event the committee or staff member reviews the original request and revises it to meet budgetary restrictions (A15), with the administration then reviewing the new request (A12).

(2) The recommendations are sound but are beyond limits of the current budget. The administration then establishes a purchasing schedule for acquisition of the requested items (A16).

(3) The budget may permit immediate purchase of items deemed necessary (Q17).

In the case of alternatives "2" and "3," items are purchased (A17) and subsequently received and catalogued (A18), at which time they are ready for use.

Circulation of Books

Aside from teachers, books constitute the most valuable and time-honored learning resource of a school. Responsibility for circulation of books is, therefore, one of the major responsibilities of a school. In the Continuous Progress School, this responsibility resides with the IMC. Procedures for book circulation are described in Figure 3.

On student request, books are issued for a specified time period (AØ1). This time period may range from a day or two in the case of certain reserve books to a year or more in the case of a text for a course.

When a book is issued for an extended time period (QØ3), as in the case of a text, the stock is evaluated (AØ3) to determine whether additional copies of the book should be ordered. If indications point to a need for more copies (QØ5), such a request is submitted (AØ5). If indications are that the supply is adequate (M1 to QØ6), no action is taken.

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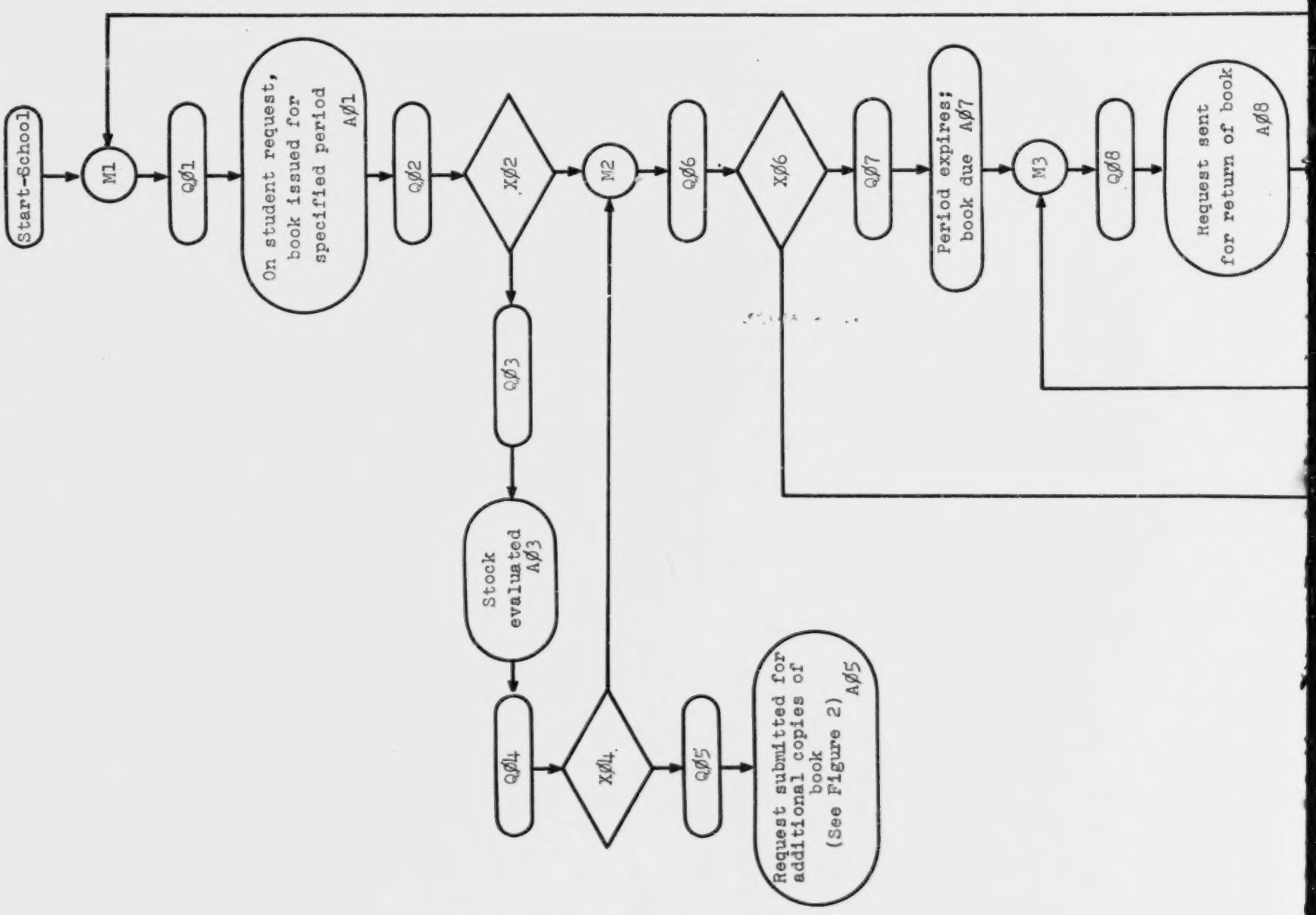
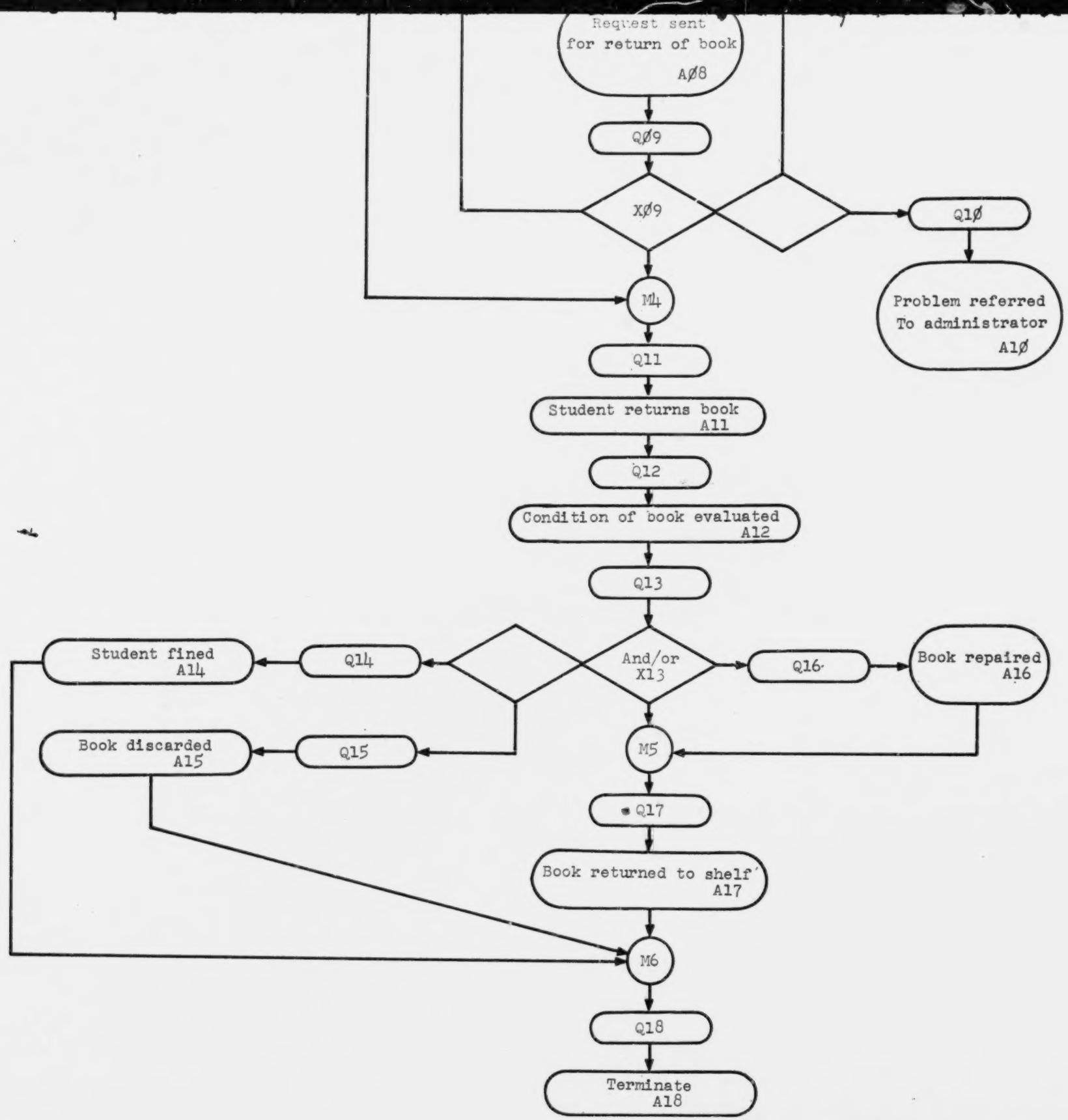



Figure 3. Circulation of Books


Request sent for return of book AØ8
QØ9
XØ9
Q1Ø
Problem referred To administrator A1Ø
M4
Q11
Student returns book A11
Q12
Condition of book evaluated A12
Q13
Student fined A14
Q14
And/or X13
Q16
Book repaired A16
Book discarded A15
Q15
M5
Q17
Book returned to shelf A17
M6
Q18
Terminate A18

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Most students return their books by the due date (XØ6 to A11 via M4 and Q11); however, sometimes they do not (AØ7). In the latter event, a request is sent for the return of the book (AØ8). Ordinarily, the book is then returned (XØ9 via M4 to A11). Sometimes the student wants to keep the book longer, in which case it is reissued to him (XØ9 via M1 to AØ1). In some instances the student does not respond to the request. If only one "return request" has been sent, another is forwarded to him (XØ9 via M3 to AØ8). If the student still does not respond, the problem is referred to an administrator (A1Ø).

When a book is returned to the IMC, its condition is evaluated (A12). Three alternatives are possible. The book ordinarily is in good condition, in which case it is simply returned to the shelf (A17); it may be damaged, in which event the book is repaired (A16) and then returned to the shelf; the book may be so badly damaged that it must be discarded (A15). In case the book is damaged, the student may be fined (A14) depending on circumstances and extent of the damage.

When the book has been discarded or returned to the shelf, a book "loan" is considered to have been completed (A18).

Scheduling and Use of IMC Facilities

One of the more important IMC functions is that of scheduling and supervising use of space and equipment. This function is portrayed graphically in Figure 4. In Figure 4, the IMC is shown as giving the IPC (Information Processing Center) information on equipment and space availability (2AØ1), and students are depicted as requesting space and equipment (1AØ1). When the IPC receives these inputs, it schedules students according to their priorities and according to availability of space and equipment (3AØ1) and reports the schedules back to the students and the IMC (3AØ2).

When the student receives his schedule, he reports to the IMC (1AØ2) and receives his space and/or equipment (2AØ2), which he uses (1AØ3 and 2AØ3) until completion or until the next student arrives. At this time he releases his IMC facilities (1AØ4 and 2AØ4) and terminates this activity (1AØ5).

When equipment is returned to the IMC (2AØ4) this equipment must be inspected (2AØ5) for defects. Normally, it is in satisfactory condition and is returned to operation (2XØ6 via 2M1 to 2AØ1). Sometimes the equipment needs servicing or repairing. This function is effected before the equipment is returned to operation (2A11). On rare occasions equipment is so badly damaged that it is discarded (2AØ7). Evaluation is then made of the need for replacement (2AØ8), and if necessary, replacement is recommended (2A1Ø). In any event, the system loops back, via 2M1, to the beginning.

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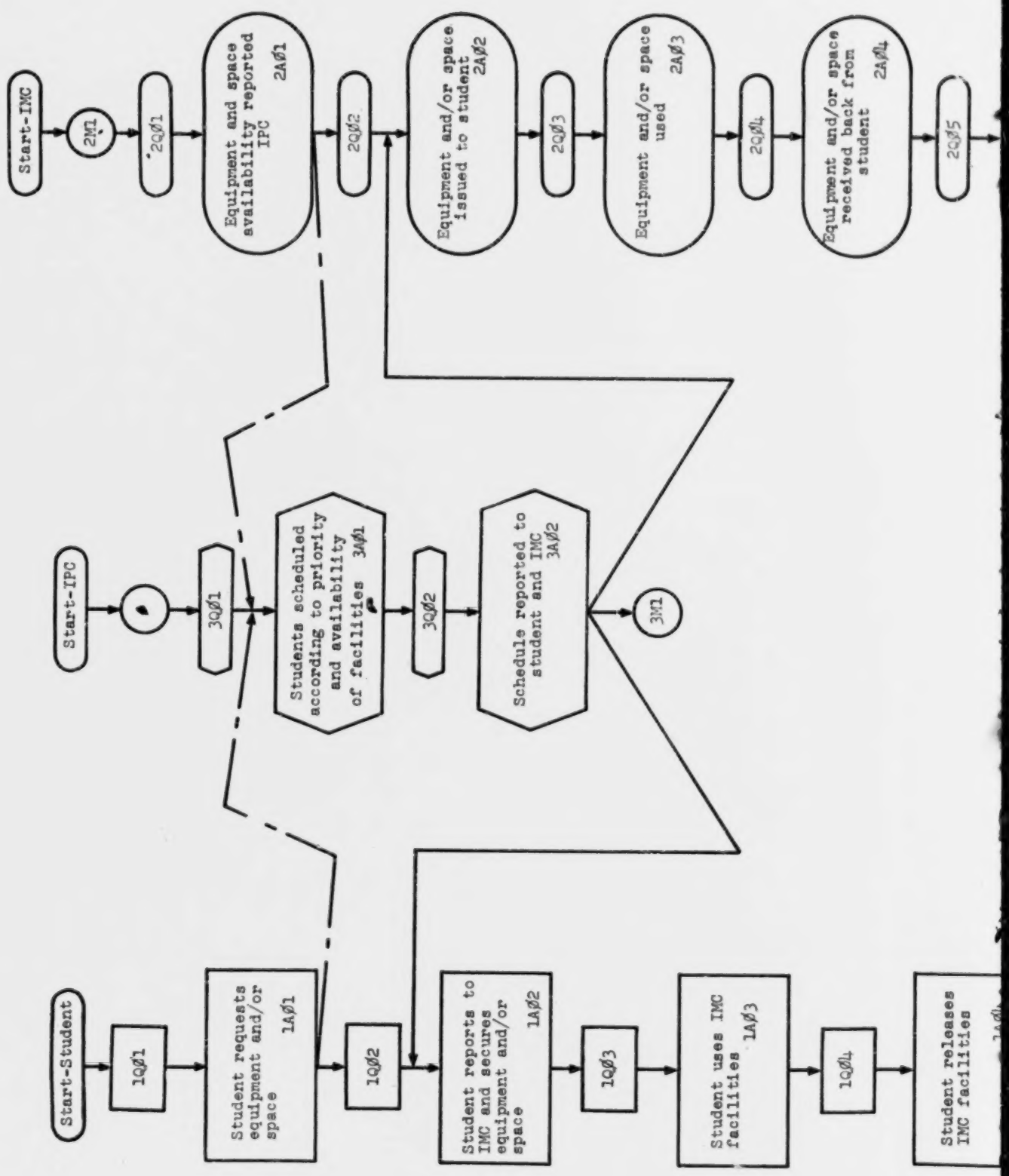
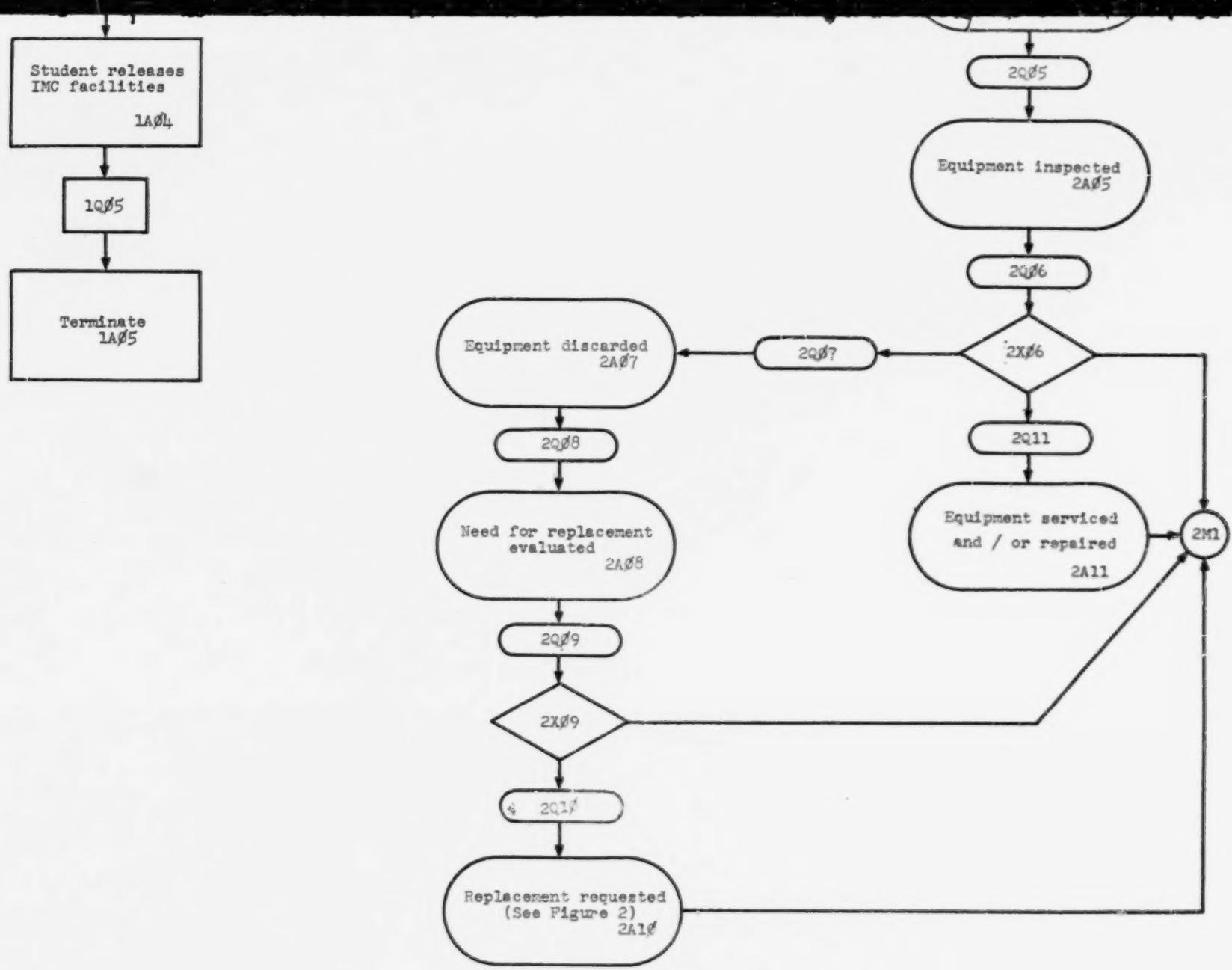



Figure 4. Scheduling and Use of IMC Facilities


Student releases IMC facilities
1AØ4
1QØ5
Terminate
1AØ5
2QØ5
Equipment inspected
2AØ5
2QØ6
2XØ6
2QØ7
Equipment discarded
2AØ7
2QØ8
Need for replacement evaluated
2AØ8
2QØ9
2XØ9
2Q1Ø
Replacement requested
(See Figure 2)
2A1Ø
2Q11
Equipment serviced and / or repaired
2A11
2M1

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## SUMMARY

TM-1493/105/00 is the third in a series of documents describing operation of a Continuous Progress School. This document deals with the Instructional Materials Center (IMC)--a center in which are combined library, bookstore, audiovisual center, and materials development functions. Furthermore, some of these functions are substantially different in a CPS than in a traditional school. For example, all books, both library and test, are circulated via the IMC. This is because the Continuous Progress Plan permits students to progress at varying rates through the curriculum, so that while one student may begin geometry on the first day of school and finish on the last day, another student may begin on the twenty-third day of school and finish on the eighty-sixth, and still another student may begin on the twenty-third day and not finish until the seventy-fifth day of the ensuing year. Thus, all books need to be available on a variable time basis.

In the CPS, audiovisual equipment and materials are utilized on the basis of student rather than faculty request. When an individual student is ready for a particular film or tape or other audiovisual presentation, he requests it. While this procedure permits much greater flexibility, it also places much greater demands on equipment, materials, and scheduling. Arrangements must be made to meet these increased demands.

In TM-1493/105/00, four facets of the IMC are portrayed and described. These are (1) acquisition and disposition of purchasable items, which parallel similar functions in a traditional school; (2) acquisition of new books and equipment, a function which is also typical; (3) circulation of books, which differs from the traditional form because of the continuous progress nature of the school; and (4) scheduling and use of IMC facilities, which also differ because this is a Continuous Progress School.